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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,264	10/31/2001	Scott A. Waterman	1546.009US1	3913
21186	7590	01/27/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			VEILLARD, JACQUES	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/004,264

Applicant(s)

WATERMAN ET AL.

Examiner

Jacques Veillard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18 and 20-30 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/31/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the applicant's communication filed on 10/5/2004.
2. Claims 1-30 are pending and presented for examination.
3. Claims 18-30 have been elected without traverse based on a restriction requirement.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 3/4/2002, 3/3/2003, 2/2/2004, and 10/5/2004 was filed after the mailing date of the application on 10/31/2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, it has been placed in the application file and the information referred to therein is being considered as to the merits.

Drawings

5. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.

Claim Objections

6. Claim 27 is objected to, as being of improper dependent form for failing to further limit the subject matter of a previous claim, because claim (15) from which claim 27 is depending on has been withdrawn from consideration. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form. For purposes of examination examiner assume that claim 27 is depending on claim 25.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18, 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (U. S. Pat. No. 6,233,575) in view of Doerre et al. (U. S. Pat. No. 6,446,061).

As per claim 18, Agrawal et al. disclose a “multilevel taxonomy based on features derived from training documents classification using fisher values as discrimination values” by providing a system, process and article of manufacture for organizing a large text database into a hierarchy of topics and for maintaining this organization as documents (See Agrawal et al. title, the abstract, col.1, lines 18-24 and col.9, line 51 through col.10, line 22), to assist a user in classifying a document, in a set of documents, to at least one node, in set of nodes, in a taxonomy in a set of multiple taxonomies. In particular, Agrawal et al. disclose the claimed limitations of “a user interface, to output the nodes and candidate features, and to receive user-input selecting and assigning features to corresponding nodes for inclusion in the user-selected feature/node list” by providing at figure 1, component 12 a user interface permitting of receiving user input, for selecting features and output the nodes and candidate features (See Agrawal et al. Fig. 1 component 12, col.8, lines 14-36); a document classifier, coupled to receive the user-selected feature/node list, to classify the documents to the nodes in the multiple taxonomies (See Agrawal et al. Fig.3 component 50 and col.11, lines 23-31); a user-selected feature/node list, including those candidate features that have been selected by the user and assigned to nodes in the multiple

taxonomies for use in classifying the documents to the nodes (See Agrawal et al. col.9, lines 41-57).

It is noted, however, Agrawal et al. did not specifically disclose the claimed limitations of “a candidate feature extractor, including an input receiving the set of documents and an output providing candidate features extracted automatically from the document without human intervention”. On the hand, Doerre et al. achieved this claimed features by providing a mechanism relates to a computerized method of generating a content taxonomy of a multitude of electronic documents without human intervention (See Doerre et al. title, abstract, col.2, line 30 through col.3, line 13, col.4, lines 31 through col.5, line 43, col.6, lines 9-18, and col.8, line 56 through col.9, line 1).

It would have been obvious to one of ordinary skill in the art at the time of the Applicant’s invention to modify the multilevel taxonomy based on features derived from training documents classification ... system of Agrawal et al. by incorporating the extractor mechanism taught by Doerre et al. The motivation being to have enhanced the system of Agrawal et al. by allowing it to find the predominant themes in a collection of documents search for relevant documents using powerful and flexible queries wherein text can be seen as information extractors which enrich documents with information about their contents and classify the documents quickly and efficiently.

As per claim 25, most of the limitations of this claim have been noted in the rejection of claim 18. Applicant’s attention is directed to the rejection of claim 18 above. In addition, Doerre et al. disclose the claimed limitations of “extracting automatically candidate features from a set

of documents; outputting to a user an indication of the candidate features; outputting to the user an indication of relevance of the candidate features to nodes” (See Doerre et al. col.9, lines 39-49 and col.11, lines 8-22). Therefore, it is rejected on similar grounds corresponding to the arguments given for the rejected claim 18 above.

As per claims 20 and 26, most of the limitations of this claim have been noted in the rejection of claims 18 and 25. Applicant’s attention is directed to the rejection of claims 18 and 25 above. In addition, the combination of Agrawal et al. and Doerre et al, as modified, discloses the claimed limitations of “in which the user interface outputs, for a document selected by the user, those features corresponding to that particular document” (see Agrawal et al. col.7, line 59 through col.8, line 13 and col.9, lines 35-45).

As per claims 21 and 27, most of the limitations of this claim have been noted in the rejection of claims 18 and 25. Applicant’s attention is directed to the rejection of claims 18 and 25 above. In addition, the combination of Agrawal et al. and Doerre et al, as modified, discloses the claimed limitations of “in which the user interface outputs, for a document a corresponding indicator of how successfully the document classifier classified the document to the nodes in the multiple taxonomies” (See Agrawal et al. col.9, lines 35-49).

As per claims 22 and 28, most of the limitations of this claim have been noted in the rejection of claims 18 and 25. Applicant’s attention is directed to the rejection of claims 18 and 25 above. In addition, the combination of Agrawal et al. and Doerre et al, as modified, discloses

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the claimed limitations of “in which the user interface outputs a list of the documents ranked according to the number of nodes to which each document was classified by the document classifier”(See Agrawal et al. col.14, 33-49, col.15, lines 43-47, and col.21, line 21 through col.22, line 17).

As per claims 23 and 29, most of the limitations of this claim have been noted in the rejection of claims 18 and 25. Applicant’s attention is directed to the rejection of claims 18 and 25 above. In addition, the combination of Agrawal et al. and Doerre et al, as modified, discloses the claimed limitations of “in which the user-interface outputs a representation of the multiple taxonomies” (See Agrawal et al. col.8, lines 54-63).

As per claims 24 and 30, most of the limitations of this claim have been noted in the rejection of claims 18 and 25. Applicant’s attention is directed to the rejection of claims 18 and 25 above. In addition, the combination of Agrawal et al. and Doerre et al, as modified, discloses the claimed limitations of “in which the document classifier includes a first input receiving a selected subset of the set of documents, each document in the subset assigned by the user to at least one node, and in which the document classifier classifies the set of documents to nodes in the multiple taxonomies using features of the selected subset of documents” (See Agrawal et al. col.7, line 59 through col.8, line 13 and line 54 through col.9, line 45, and col.10, lines 12-65).

Allowable Subject Matter

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9. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

The prior art taken singularly or in combination fail to teach or suggest a system contains a first input receiving the set of documents; a second input receiving the user-selected feature/node list; a third input receiving multiple taxonomies; and an output providing, edge weights from the documents to the nodes as recited in claim 19.

Other Prior Art Made Of Record

11. Kupiec	U. S. Pat. No. 6,411,962,
Snow et al.	U. S. Pat. No. 6,055,540,
Edlund et al.	U. S. Pat. No. 6,546,388,
Kirk et al.	U. S. Pat. No. 5,768,578,
Tsourikov et al.	U. S. Pat. No. 6,167,370,
Wical	U. S. Pat. No. 6,038,560, and
Snow et al.	U. S. Pat. No. 6,185,550.

Conclusion


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (571) 272-4086. The examiner can normally be reached on Mon. to Fri. from 9 Am to 4:30 PM, alt. Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272- 4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHARLES RONES
PRIMARY EXAMINER



Jacques Veillard
Patent Examiner TC 2100

January 24, 2005